Invalidity of Asserted Claims of U.S. Patent No. 7,532,200
Under 35 U.S.C. §§ 102(b) and 103 by U.S. Patent No. 5,119,077 to Giorgio ("Giorgio")[4]

Based upon the claim interpretations Better Mouse Company, LLC ("BMC") appears to be asserting and the applications of those interpretations to Defendants' products in BMC's Infringement Contentions, **U.S. Patent No. 5,119,077** anticipates and/or renders obvious, alone or in combination with other prior art identified in Defendants' Invalidity Contentions, the asserted claims as described in part below. This invalidity claim chart is not an admission by Defendants that the accused products, including any current or past versions of these products, are covered by, or infringe these claims, particularly when they are properly construed. Nothing in these contentions should be interpreted as an acquiescence to or assertion of a particular claim construction by Defendants.

#	'200 Claim Language	U.S. Patent No. 5,119,077 ("Giorgio")
1	1. An apparatus for setting multi-stage displacement resolution of a mouse, comprising:	Giorgio discloses an apparatus that sets the multi-stage displacement resolution of a mouse. *See* Ex. C, at Abstract ("An improved computer mouse allows a computer operator to interactively adjust horizontal and vertical resolution by depressing switches on the mouse frame and moving the mouse frame on a flat surface."); *see also, generally*, 2:36-3:27.
1A	a X-Y axis plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a two-dimensional space;	Giorgio discloses an X-Y axis plane displacement detector that senses the distance and moving direction of the mouse. In Giorgio, the displacement detector is a ball mechanically-coupled (using means "well known in the art") to two optical or mechanical encoders that produce output signals indicative of movement of the ball 18 in any one of four directions. *Id.*, at 3:50-58 ("A ball 18 is mechanically coupled to two optical or mechanical encoders 19a and 19b that produce output signals on respective lines 20 and 24 indicative of movement of the ball 18 in any one of four directions. The means of mechanically coupling the ball to two optical or mechanical encoders 19a and 19b is well known in the art. The output signals on lines 20 and 24 emanating from these encoders 19a and 19b are a result of the

[4] U.S. Patent No. 5,119,077 to Giorgio ("Giorgio") issued on June 2, 1992, well before the January 18, 2005, filing date of U.S. Patent No. 7,532,200 ("the '200 Patent"). Accordingly, Giorgio constitutes prior art under 35 U.S.C. § 102 (b). To the extent that Giorgio is found not to anticipate one or more claims of the '200 Patent under 35 U.S.C. §102, Giorgio renders those claims obvious under 35 U.S.C. §103 when combined with other art identified in Defendants' Invalidity Contentions (e.g., the OmniScan hand scanner described in the December 7, 1993 issue of PC Magazine ("OmniScan"). It would have been obvious to combine the teaching of Giorgio with other art identified in Defendants' Invalidity Contentions at least because the references all pertain to setting multi-stage displacement resolution of a computer mouse directly through a switch on the mouse.

#	'200 Claim Language	U.S. Patent No. 5,119,077 ("Giorgio")
		movement of ball 18.").
1B	a switching circuit for setting a resolution value, the switching circuit having multiple switches for being manually adjusted to generate the resolution value directly, each switch being coupled to a resolution setting pin, each resolution setting pin having a state determined by the switch coupled thereto; and	Giorgio discloses a switching circuit for setting a resolution value. In Giorgio's preferred embodiment, the switching circuit comprises two single pole double throw switches coupled to signal lines. The switches (element 12) and the signal lines (elements 14a-14d) are shown in Figure 1. In Giorgio's preferred embodiment, when both switches are depressed, and the mouse is moved, the microprocessor adjusts the resolution of the mouse. *Id.*, at 7:28-35 ("As long as switches 12 are depressed and mouse 10 continues to move a distance greater than the value stored by the internal A/D register, resolution adjustments are continuously made. The sequence would start with normal resolution, followed by high resolution, followed by very high resolution, followed by very low resolution, followed by low resolution, followed by normal resolution, etc…"). In the preferred embodiment of Giorgio, the switching circuit includes multiple switches that can be manually adjusted. *Id.*, at 5:20-22 ("Switch assembly 12 comprises two single pole double throw (SPDT) switches…"). The switching circuit in Giorgio is designed to adjust resolution directly – *i.e.*, without having to also manipulate a software driver/tool. *Id.*, at 3:3-6 ("According to the present invention, a computer operator depresses the switches on the computer mouse and moves the frame of the computer mouse, thereby adjusting the resolution of the X, Y encoders.") On information and belief, the mouse microprocessor disclosed in Giorgio must have "pins." As discussed above, pins are necessary for an integrated circuit such as a microcontroller to electrically interface with other electrical components and/or a circuit board. Since the microcontroller shown in Figure 1 of Giorgio electrically interfaces with several other electrical components including a switch assembly and an X-Y displacement detector, the microcontroller of Figure 1 necessarily includes pins. Based on the schematic diagram of Figure 1 of Giorgio, a person of ordinary skill in the art would understand that the circuit of Figure 1 necessarily includes "resolution setting pins." The pins at the interface between signal lines 14a - 14d are

#	'200 Claim Language	U.S. Patent No. 5,119,077 ("Giorgio")
		"resolution setting pins" in that they enable microcontroller 16 to sense changes in voltage level of these signals. *Id.*, at 5:22- 28 ("When both of these switches 12 are depressed, signal lines 14A and 14C change from ground voltage to a +v voltage and signal lines 14B and 14D change from a +v voltage to a ground voltage. All four signal lines 14A through 14D are input to four input lines of microcontroller 16 which senses the change in the voltage levels of these signals.").
1C	a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit , the mouse micro controller determining the resolution value based on the states of the resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register.	The preferred embodiment of Giorgio includes a microcontroller that is coupled both to the X-Y axis plane displacement detector and the switching circuit. This is shown in Figure 1. One of ordinary skill in the art would know that all microcontrollers necessarily have multiple registers. In Giorgio, the specific microcontroller example is the Motorola MC68HC11. One of ordinary skill in the art would know that the Motorola MC68HC11, like all microcontrollers, includes several registers. The switches 12 in Giorgio's preferred embodiment determine the state of resolution setting pins. Giorgio further discloses that the "microcontroller 16 selects the next dynamic tracking parameter and stores this parameter in internal RAM" (Col 6, lines 64-66). A person of ordinary skill in the art would understand that any parameter (or resolution value) calculated or read by the microcontroller must be stored for some period of time in a register in the microcontroller. On information and belief, it is not possible to store a parameter to RAM without first storing it in a register. The microcontroller in Giorgio's preferred embodiment responds to signals from the X, Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer. *See id.*, at 1:19-24 ("The invention described herein relates to an improved computer mouse comprising a frame that houses a ball coupled to mechanical or optical encoders that, in combination, produce signals indicative of X (horizontal) and Y (vertical) movement as the frame is moved in any direction along a flat surface."); 3:38-43 ("The invention incorporates industry standard switches for inputting signals to a computer for menu selection, item selection within a menu, etc., while the computer is normally executing commercial software programs such as Lotus 123, DBASE, Wordstar, or the like.")

#	'200 Claim Language	U.S. Patent No. 5,119,077 ("Giorgio")
		The amount the cursor moves on the screen is based on the resolution value stored in the register of the microcontroller. *See id.*, at 1:33-37 ("In all prior art computer mouse assemblies, the resolution settings of the internal encoders are fixed; *i.e.*, moving the frame in a given direction for a fixed distance always results in the same number of output pulses or dots per inch (dpi)."); 3:3-14 ("According to the present invention, a computer operator depresses the switches on the computer mouse and moves the frame of the computer mouse, thereby adjusting the resolution of the X,Y encoders. … Adjustments are provided for very low resolution, low resolution, normal resolution, high resolution, and very high resolution. Each resolution setting provides a different 'dpi' or dots per inch output.")
2	2. The apparatus as claimed in claim 1, further comprising a button set for clicking an icon selected by the mouse cursor.	Giorgio discloses an "improved industry standard computer mouse." A person of ordinary skill in the art would understand that an "industry standard computer mouse" includes two buttons, a left button and a right button (*i.e.*, a "button set"), for "clicking an icon selected by the mouse cursor." *Id.*, at 2:37-51; 7:63-65. To the extent a mouse with a "button set for clicking an icon" was not disclosed in Giorgio, it would have been obvious to incorporate a button set like that disclosed in Chien. *See* Chien, at Fig. 2. A person of skill in the art would have been motivated to use a mouse with left and right buttons because it is a practical, convenient, and standard mouse configuration and because it would conform to existing devices and therefore consumer expectations.
3	3. The apparatus as claimed in claim 2, wherein the button set has a left button and a right button.	Giorgio discloses an "improved industry standard computer mouse." A person of ordinary skill in the art would understand that an "industry standard computer mouse" includes two buttons, a left button and a right button (*i.e.*, a "button set"), for "clicking an icon selected by the mouse cursor." *Id.*, at 2:37-51; 7:63-65. To the extent a mouse with a "button set for clicking an icon" was not disclosed in Giorgio, it would have been obvious to incorporate a button set like that disclosed in Chien. *See* Chien, at Fig. 2. A person of skill in the art would have been motivated to use a mouse with left and right buttons because it is a practical, convenient, and

#	'200 Claim Language	U.S. Patent No. 5,119,077 ("Giorgio")
		standard mouse configuration and because it would conform to existing devices and therefore consumer expectations.
6	6. An apparatus for setting multi-stage displacement resolution of a mouse, comprising:	*See claim limitation 1.*
6A	a X-Y axis plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a two-dimensional space;	*See claim limitation 1A.*
6B	an N-stage switch for setting a resolution value, the N-stage switch circuit having a switching button capable of being manually switched to one of positions 1 to N, and accordingly activating a connected resolution setting pin to indicate a state, where N is a positive integer; and	*See claim limitation 1B.* The switch assembly 12 disclosed in the preferred embodiment of Giorgio meets this requirement because it has at least two possible positions (*e.g.*, "BOTH SWITCHES 12 DEPRESSED? – YES" or "BOTH SWITCHES 12 DEPRESSED? – NO"). *See id.*, Fig. 2; 7:14-31. Giorgio's switches are capable of being switched from a not-depressed position to a depressed position. *See, e.g., id.*, at 3:3-6; 5:20-22. In addition Giorgio states: "[T]he preferred embodiment, as disclosed, uses a two switch computer mouse. Other embodiments are possible using a different number of switches." Ex. B, at 7:61-66. If the term "N-stage switch…" were construed to require a switch with two or more positions, and if the accelerated motion switches 2 in Giorgio were found not to constitute such a switch, it would have been obvious to include a single switch with more than two positions for setting a resolution value, like the slide switch for switching between 100, 200, 300 and 400 dpi scans in the OmniScan hand scanner. The use of multi-position switches was known in the art, as shown by, for example, the OmniScan hand scanner described in the December 7, 1993 issue of PC Magazine. The OmniScan hand scanner, which like a mouse, was a hand held computer attachment, is described as having a slide switch on the side of the scanner head for switching between 100, 200, 300 and 400 dpi scans. *Id.*, at p. 1. A person of ordinary skill in the art would have been motivated to modify the mouse of Giorgio to use a switch like the OmniScan hand scanner switch, rather than the combination of switches described in Giorgio, to the extent that users found it more

#	'200 Claim Language	U.S. Patent No. 5,119,077 ("Giorgio")
		convenient to use a different type of switch. A person of skill in the art would be further motivated to use a switch with multiple positions corresponding to specific mouse resolutions because such switches are well known, easy to use, compact in size, and commonly available.
6C	a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit, the mouse micro controller determining the resolution value based on the state of the connected resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register.	*See claim limitation 1C.*
7	7. The apparatus as claimed in claim 6, further comprising a button set for clicking an icon selected by the mouse cursor.	*See claim limitation 2.*
8	8. The apparatus as claimed in claim 7, wherein the button set has a left button and a right button.	*See claim limitation 3.*

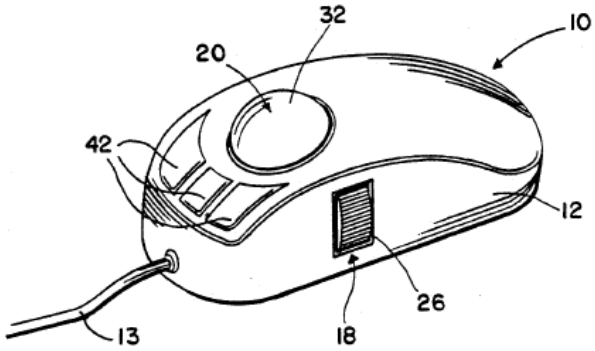
#	'200 Claim Language	U.S. Patent No. 5,119,077 ("Giorgio")
9	9. The apparatus as claimed in claim 6, wherein the N-stage switch is configured on a lateral surface of the mouse.	In the preferred embodiment of Giorgio, the switching circuit includes multiple switches that are designed to be manually adjusted. To the extent the manually adjustable switches were found not to be configured on a lateral side of a mouse, Chien discloses a mouse with a "changeable input ratio" (Chien, at 1:7-8) where when two switches positioned on the lateral frame of the mouse are pressed, a microprocessor in the mouse multiplies the sliding dance by a predetermined constant. *Id.*, at 3:10-16. It would have been obvious to position switches like those disclosed in Giorgio "on a lateral surface of the mouse," as taught by Chien. A mouse designer has freedom to place switches wherever is most convenient for the user. Placing the resolution setting switch on a lateral surface of the mouse is obvious. A person of skill in the art would have been motivated to place a switch on a lateral surface of the mouse so that users are not confused with the mouse's normal operation buttons and so that the resolution setting buttons are not depressed accidentally.

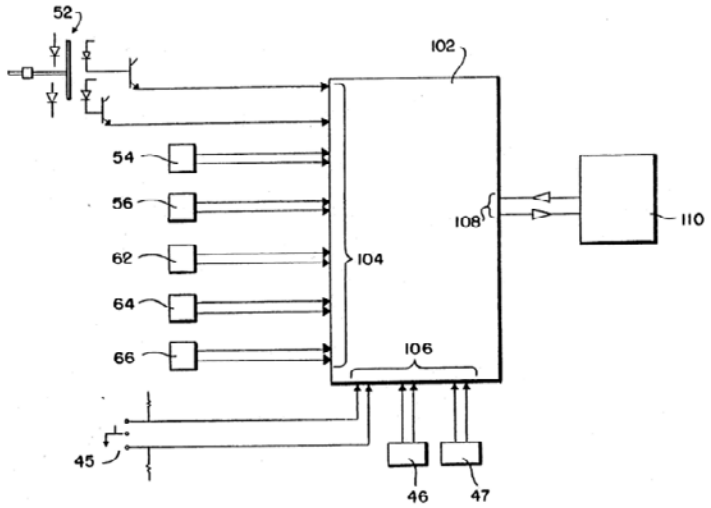
Invalidity of Asserted Claims of U.S. Patent No. 7,532,200
Under 35 U.S.C. §§ 102(b) and 103 by U.S. Patent No. 5,298,919 to Chang ("Chang")[5]

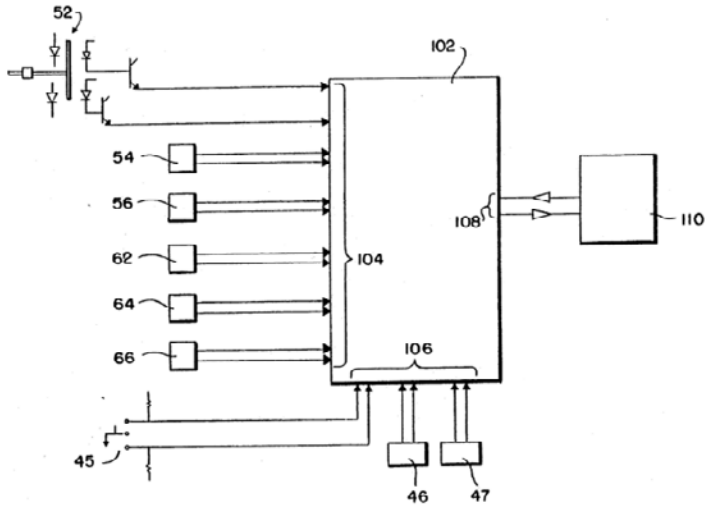
Based upon the claim interpretations Better Mouse Company, LLC ("BMC") appears to be asserting and the applications of those interpretations to Defendants' products in BMC's Infringement Contentions, **U.S. Patent No. 5,298,919** issued on March 29, 1994 ("Chang") anticipates and/or renders obvious, alone or in combination with other prior art identified in Defendants' Invalidity Contentions, the asserted claims as described in part below. This invalidity claim chart is not an admission by Defendants that the accused products, including any current or past versions of these products, are covered by, or infringe these claims, particularly when they are properly construed. Nothing in these contentions should be interpreted as an acquiescence to or assertion of a particular claim construction by Defendants.

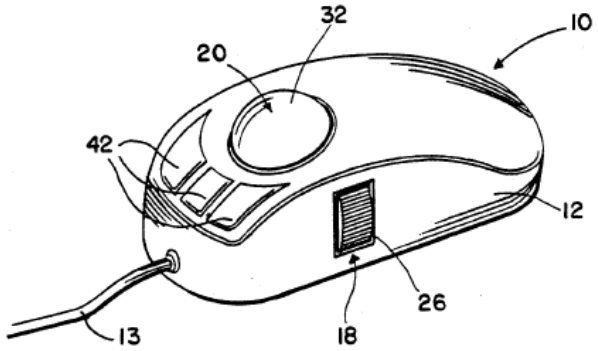
#	'200 Claim Language	U.S. Patent No. 5,298,919 ("Chang")
1	1. An apparatus for setting multi-stage displacement resolution of a mouse, comprising:	To the extent the preamble is considered to limit the claim, Chang discloses an apparatus that sets the multi-stage displacement resolution of a mouse. *See, e.g.*, Abstract.
1A	a X-Y axis plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a two-dimensional space;	Chang discloses an X-Y axis plane displacement detector that senses the distance and moving direction of the mouse. *See, e.g.*, 1:15-30; 4:60-68; 5:12-64; 6:26-39; 6:65-7:6; 12:36-54; 5:12-14 ("Two encoders 52, 54 are associated with the roller ball 22, one for the x translational coordinate and one for the y translational coordinate.")

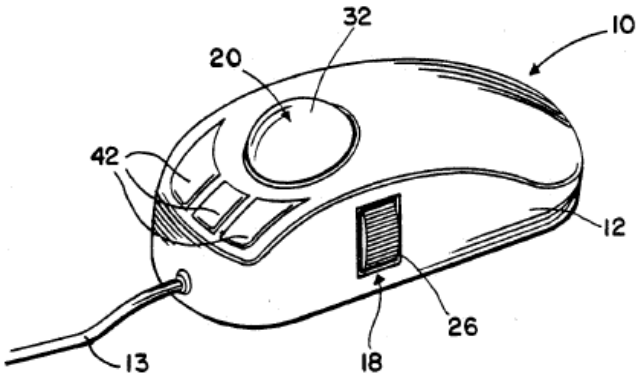
[5] U.S. Patent No. 5,298,919 to Chang issued on March 29, 1994, well before the January 18, 2005, filing date of U.S. Patent No. 7,532,200 ("the '200 Patent"). Accordingly, Chang constitutes prior art under 35 U.S.C. § 102 (b). To the extent that Giorgio is found not to anticipate one or more claims of the '200 Patent under 35 U.S.C. §102, Giorgio renders those claims obvious under 35 U.S.C. §103 when combined with other art identified in Defendants' Invalidity Contentions (e.g., the OmniScan hand scanner described in the December 7, 1993 issue of PC Magazine ("OmniScan"). It would have been obvious to combine the teaching of Giorgio with other art identified in Defendants' Invalidity Contentions at least because the references all pertain to setting multi-stage displacement resolution of a computer mouse directly through a switch on the mouse.

#	’200 Claim Language	U.S. Patent No. 5,298,919 (“Chang”)
		 FIG. 1

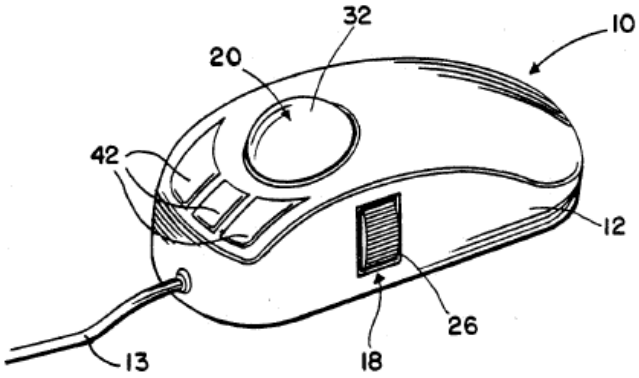
#	'200 Claim Language	U.S. Patent No. 5,298,919 ("Chang")
		 FIG. 6
1B	a switching circuit for setting a resolution value, the switching circuit having multiple switches for being manually adjusted to generate the resolution value directly, each switch being coupled to a resolution setting pin, each resolution setting pin having a state determined by the switch coupled thereto; and	Chang discloses a switching circuit for setting a resolution value, the switching circuit having multiple switches for being manually adjusted to generate the resolution value directly, each switch being coupled to a resolution setting pin, each resolution setting pin having a state determined by the switch coupled thereto. *See, e.g.*, 4:38-50; 6:60-7:12; 9:17-30; 6:61-64 ("Buttons 42 operate switches 45, 46, 47 mounted on the base 14. The switches activate various software functions such as are conventionally found on mouse input devices.")

#	'200 Claim Language	U.S. Patent No. 5,298,919 ("Chang")
		 FIG. 6
1C	a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit , the mouse micro controller determining the resolution value based on the states of the resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a	Chang discloses a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit, the mouse micro controller determining the resolution value based on the states of the resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register. *See, e.g.*, Fig. 6, 3:9-14; 5:38-45; 5:50-58; 6:65-8:13; 6:65-7:20 ("As set forth above, the signals from the encoder are transmitted to a controller 102, as shown in Fig. 6….")

#	'200 Claim Language	U.S. Patent No. 5,298,919 ("Chang")
	control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register.	
2	2. The apparatus as claimed in claim 1, further comprising a button set for clicking an icon selected by the mouse cursor.	Chang discloses an apparatus as claimed in claim 1, further comprising a button set for clicking an icon selected by the mouse cursor. *See, e.g.*, 1:30-45; 1:51-2:36; 1:36-45 ("Such indications are provided, for example, by icons displayed on the computer monitor which the user may choose by moving the cursor via movement of the mouse to the appropriate icon and pressing a button to choose that icon.")  FIG. 1
3	3. The apparatus as claimed in claim 2,	Chang discloses an apparatus as claimed in claim 2, wherein the button set has a left

#	'200 Claim Language	U.S. Patent No. 5,298,919 ("Chang")
	wherein the button set has a left button and a right button.	button and a right button. *See, e.g.*, 2:58-3:2.  FIG. 1
6	6. An apparatus for setting multi-stage displacement resolution of a mouse, comprising:	To the extent the preamble is considered to limit the claim, Chang discloses an apparatus for setting multi-stage displacement resolution of a mouse. *See claim limitation 1.*
6A	a X-Y axis plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a two-dimensional space;	Chang discloses a X-Y plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a two-dimensional space. *See claim limitation 1A.*
6B	an N-stage switch for setting a resolution value, the N-stage switch circuit having a switching button capable of being manually switched	Chang discloses an N-stage switch for setting a resolution value, the N-stage switching circuit having a switching button capable of being manually switched to one of the positions 1 to N, and accordingly activating a connected resolution setting pin to indicate a state, where N is a positive integer.

#	'200 Claim Language	U.S. Patent No. 5,298,919 ("Chang")
	to one of positions 1 to N, and accordingly activating a connected resolution setting pin to indicate a state, where N is a positive integer; and	*See claim limitation 1B.*
6C	a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit, the mouse micro controller determining the resolution value based on the state of the connected resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register.	Chang discloses a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit, the mouse micro controller determining the resolution value based on the state of the connected resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register. *See claim limitation 1C.*
7	7. The apparatus as claimed in claim 6, further comprising a button set for clicking an icon selected by the mouse cursor.	Chang discloses an apparatus as claimed in claim 6, further comprising a button set for clicking an icon selected by the mouse cursor. *See claim limitation 2.*
8	8. The apparatus as claimed in claim 7, wherein the button set has a left button	Chang discloses an apparatus as claimed in claim 7, wherein the button set has a left button and a right button.

#	'200 Claim Language	U.S. Patent No. 5,298,919 ("Chang")
	and a right button.	*See claim limitation 3.*
9	9. The apparatus as claimed in claim 6, wherein the N-stage switch is configured on a lateral surface of the mouse.	Chang discloses an apparatus as claimed in claim 6, wherein the N-stage switch is configured on a lateral surface of the mouse.  FIG. 1 *See, e.g.*, 4:38-50; 5:65-6:14; 8:25-34; 9:3-16.

Invalidity of Asserted Claims of U.S. Patent No. 7,532,200
Under 35 U.S.C. §§ 102(a),(b) and 103 by Japanese Patent Application No. JPA-H8-123615 ("Wa")[6]

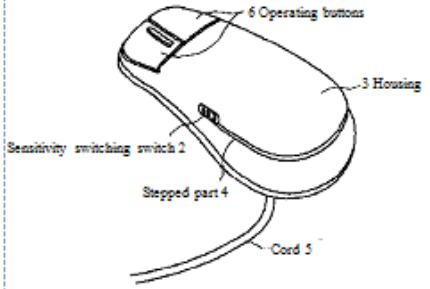
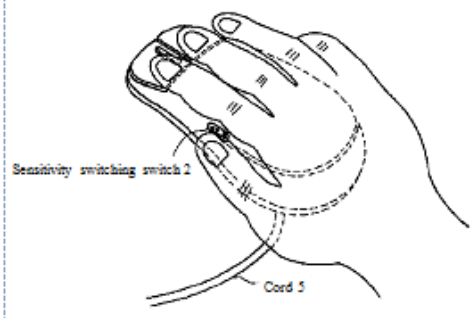
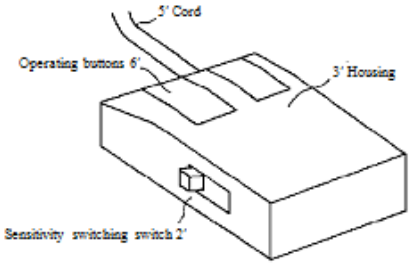
Based upon the claim interpretations Better Mouse Company, LLC ("BMC") appears to be asserting and the applications of those interpretations to Defendants' products in BMC's Infringement Contentions, **JPA-H8-123615** anticipates and/or renders obvious, alone or in combination with other prior art identified in Defendants' Invalidity Contentions, the asserted claims as described in part below. This invalidity claim chart is not an admission by Defendants that the accused products, including any current or past versions of these products, are covered by, or infringe these claims, particularly when they are properly construed. Nothing in these contentions should be interpreted as an acquiescence to or assertion of a particular claim construction by Defendants.

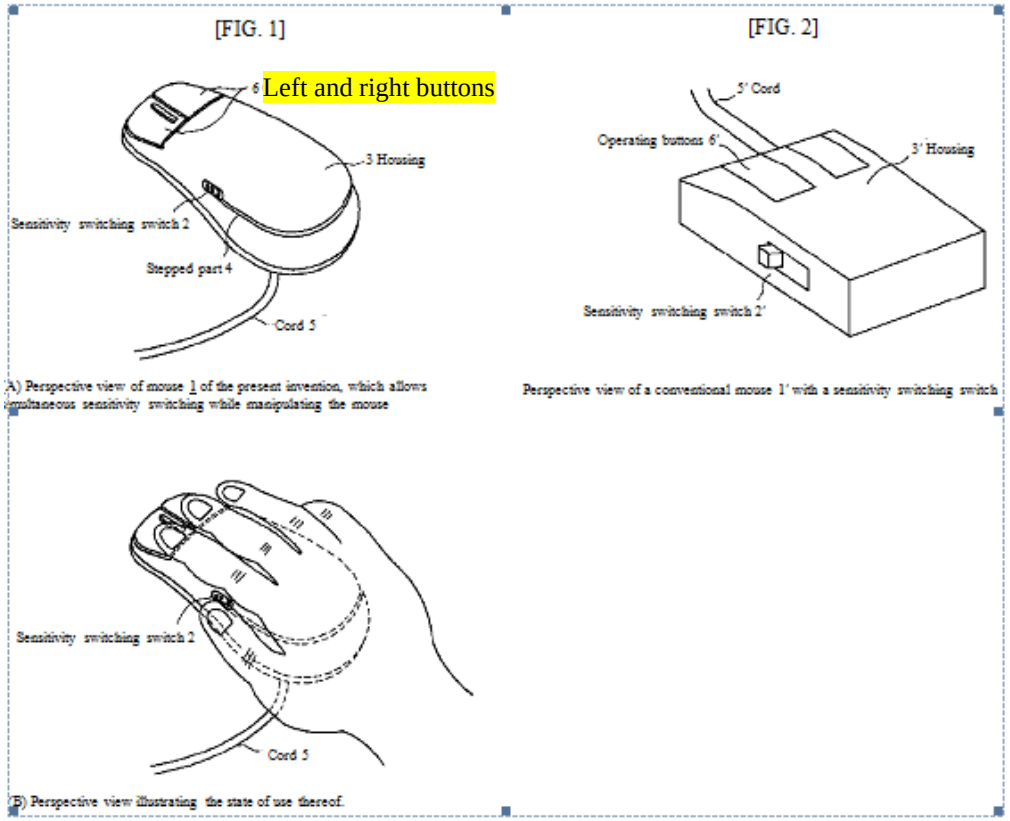
#	'200 Claim Language	JPA-H8-123615 ("Wa")
1	1. An apparatus for setting multi-stage displacement resolution of a mouse, comprising:	Wa discloses an apparatus that sets multi-stage displacement resolution of a mouse. *See, e.g.*, p. 1, ¶ 57 ("The invention relates to a mouse 1 with a ***sensitivity switching switch function,*** being a mouse (a hand-held position input device which is manipulated by moving over a surface) which is connected mainly to computers such as personal computers and is used for pointing by moving a mark displayed as an image, and provides a mouse 1 which not only is easy to manufacture, does not cause fatigue, has excellent operability and contributes to increased work efficiency, but also allows simultaneous sensitivity switching while manipulating the mouse.") (emphasis added). Wa describes the sensitivity switching function as "a function which makes the movement of the pointer on the screen of a personal computer faster or slower when the mouse is displaced by the same distance." p. 2, ¶ 0002.
1A	a X-Y axis plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a	Wa discloses an X-Y axis plane displacement detector that senses the distance and moving direction of the mouse. *See, e.g.*, ¶ 0001 ("The present invention relates to … a mouse (a hand-held position input device which is manipulated by moving over

[6] Japanese Patent Application No. JPA-H8-123615 to Wa et al. (filed October 20, 1994) ("Wa") (citations are to the official translation concurrently submitted with this chart). Because Wa was published on May 17, 1996, which was well before the January 18, 2005, filing date of U.S. Patent No. 7,532,200 ("the '200 Patent"), Wa constitutes prior art under 35 U.S.C. §§ 102 (a) and (b). To the extent that Wa is found not to anticipate one or more claims of the '200 Patent under 35 U.S.C. §102, Wa renders those claims obvious under 35 U.S.C. §103 when combined with other art identified in Defendants' Invalidity Contentions (e.g., the OmniScan hand scanner described in the December 7, 1993 issue of PC Magazine ("OmniScan"). It would have been obvious to combine the teaching of Wa with other art identified in Defendants' Invalidity Contentions at least because the references all pertain to setting multi-stage displacement resolution of a computer mouse directly through a switch on the mouse.

#	'200 Claim Language	JPA-H8-123615 ("Wa")
	two-dimensional space;	a surface) which is connected mainly to computers such as personal computers and is used for pointing by moving a mark displayed as an image….")
1B	a switching circuit for setting a resolution value, the switching circuit having multiple switches for being manually adjusted to generate the resolution value directly, each switch being coupled to a resolution setting pin, each resolution setting pin having a state determined by the switch coupled thereto; and	Wa discloses a switching circuit for setting a resolution value. *See, e.g.*, ¶ 0001 ("The invention relates to a mouse 1 with a sensitivity switching switch function….") Wa describes the sensitivity switching function as "a function which makes the movement of the pointer on the screen of a personal computer faster or slower when the mouse is displaced by the same distance." p. 2, ¶ 0002. Wa also discloses a switching circuit that includes multiple switches that can be manually adjusted to generate the resolution value directly. *See, e.g.*, ¶ 0004 ("…based on human engineering investigations, a stepped part 4 has been provided in the rear part of the mouse housing 3 so as to allow manipulation of the sensitivity switching switch 2 with the thumb.") The switching circuit contemplated in Wa changes the mouse resolution directly because it does not require use of a software driver/tool running on a computer to which the mouse is connected. On information and belief, the mouse microprocessor disclosed in Wa must have "pins." Pins are necessary for an integrated circuit such as a microcontroller to electrically interface with other electrical components and/or a circuit board. Since the microcontroller of Wa electrically interfaces with several other electrical components, it necessarily includes pins.
1C	a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit , the mouse micro controller determining the resolution value based on the states of the resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction	On information and belief, a person of ordinary skill in the art knows that all microcontrollers necessarily have multiple registers and that any parameter calculated or read by the microcontroller must be stored for some period of time in a register in the microcontroller. Wa discloses a microcontroller that sets mouse resolution (and stores it in a register) based on the states of the resolution setting pins. The states of the resolution setting pins are determined by the sensitivity switching switch 2. *See, e.g.*, ¶ 0004 ("…based on human engineering investigations, a stepped part 4 has been provided in the rear part of the mouse housing 3 so as to allow manipulation of the sensitivity switching switch 2 with the thumb.") Wa further discloses a mouse micro controller that responds to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving

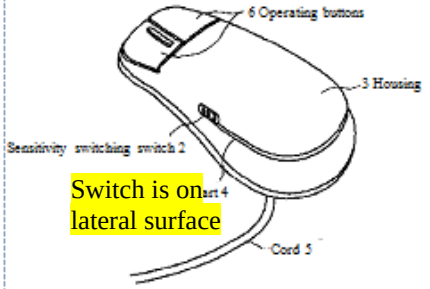
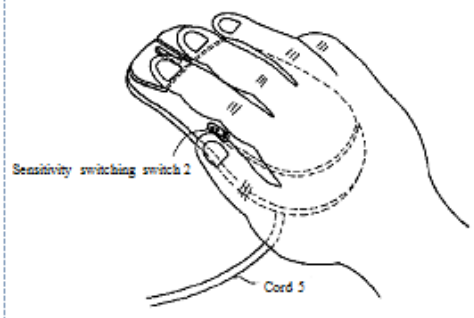
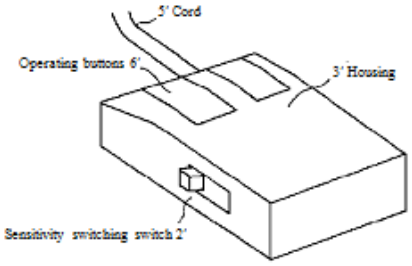
#	'200 Claim Language	JPA-H8-123615 ("Wa")
	sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register.	the mouse cursor on a screen of the computer, the mouse cursor being moved directly based on the resolution value stored in the register. *See, e.g.*, p. 2, ¶ 0002 (sensitivity switching "makes the movement of the pointer on the screen of a personal computer faster or slower when the mouse is displaced by the same distance").
2	2. The apparatus as claimed in claim 1, further comprising a button set for clicking an icon selected by the mouse cursor.	Wa discloses that a user can "manipulate the operating buttons 6 with the index finger and middle finger." *See, e.g.*, ¶ 0004; Fig. 1.

#	'200 Claim Language	JPA-H8-123615 ("Wa")
		[FIG. 1]  A) Perspective view of mouse 1 of the present invention, which allows simultaneous sensitivity switching while manipulating the mouse  B) Perspective view illustrating the state of use thereof. [FIG. 2]  Perspective view of a conventional mouse 1' with a sensitivity switching switch
3	3. The apparatus as claimed in claim 2, wherein the button set has a left button and a right button.	Wa discloses a left and right button, stating that a user can "manipulate the operating buttons 6 with the index finger and middle finger." *See, e.g.*, ¶ 0004; Fig. 1.

#	'200 Claim Language	JPA-H8-123615 ("Wa")
		
6	6. An apparatus for setting multi-stage displacement resolution of a mouse, comprising:	*See claim limitation 1.*
6A	a X-Y axis plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a two-dimensional space;	*See claim limitation 1A.*
6B	an N-stage switch for setting a	*See claim limitation 1B.* If the term "N-stage switch…" were construed to require a

#	'200 Claim Language	JPA-H8-123615 ("Wa")
	resolution value, the N-stage switch circuit having a switching button capable of being manually switched to one of positions 1 to N, and accordingly activating a connected resolution setting pin to indicate a state, where N is a positive integer; and	switch with two or more positions, and if sensitivity switching switch 2 in Wa was found not to constitute such a switch, it would have been obvious to include a single switch with more than two positions for setting a resolution value, like the slide switch for switching between 100, 200, 300 and 400 dpi scans in the OmniScan hand scanner. The OmniScan hand scanner, which like a mouse, was a hand held computer attachment, is described as having a slide switch on the side of the scanner head for switching between 100, 200, 300 and 400 dpi scans. A person of ordinary skill in the art would have been motivated to modify the mouse of Wa to use a switch like the OmniScan hand scanner switch, to the extent that users found it more convenient to use a different type of switch. A person of skill in the art would be further motivated to use a switch with multiple positions corresponding to specific mouse resolutions because such switches are well known, easy to use, compact in size, and commonly available.
6C	a mouse micro controller with a register, coupled to the X-Y axis plane displacement detector and the switching circuit, the mouse micro controller determining the resolution value based on the state of the connected resolution setting pins, setting a mouse resolution based on the resolution value and storing the resolution value in the register, the mouse micro controller responding to the distance and moving direction sensed by the X-Y axis plane displacement detector to provide a control signal to a computer connected to the mouse, thereby moving the mouse cursor on a screen of the computer, the mouse cursor	*See claim limitation 1C.*

#	'200 Claim Language	JPA-H8-123615 ("Wa")
	being moved directly based on the resolution value stored in the register.	
7	7. The apparatus as claimed in claim 6, further comprising a button set for clicking an icon selected by the mouse cursor.	*See claim limitation 2.*
8	8. The apparatus as claimed in claim 7, wherein the button set has a left button and a right button.	*See claim limitation 3.*
9	9. The apparatus as claimed in claim 6, wherein the N-stage switch is configured on a lateral surface of the mouse.	Wa discloses "a stepped part 4 has been provided in the rear part of the mouse housing 3 so as to allow manipulation of the sensitivity switching switch 2 with the thumb. As is evident from the drawing, this makes it possible to manipulate the operating buttons 6 with the index finger and middle finger and to manipulate the sensitivity-switching switch 2 with the thumb while moving the mouse at the same time." *See, e.g.*, ¶ 0004; Fig. 1.

#	'200 Claim Language	JPA-H8-123615 ("Wa")
		[FIG. 1]  A) Perspective view of mouse 1 of the present invention, which allows simultaneous sensitivity switching while manipulating the mouse  (B) Perspective view illustrating the state of use thereof. [FIG. 2]  Perspective view of a conventional mouse 1' with a sensitivity switching switch

Invalidity of Asserted Claims of U.S. Patent No. 7,532,200
Under 35 U.S.C. §§ 102 (b) and 103 by U.S. Patent No. 5,894,303 to Barr ("Barr")[7]

Based upon the claim interpretations Better Mouse Company, LLC ("BMC") appears to be asserting and the applications of those interpretations to Defendants' products in BMC's Infringement Contentions, **U.S. Patent No. 5,894,303** to Barr issued on April 13, 1999 ("Barr") anticipates and/or renders obvious, alone or in combination with other prior art identified in Defendants' Invalidity Contentions, the asserted claims as described in part below. This invalidity claim chart is not an admission by Defendants that the accused products, including any current or past versions of these products, are covered by, or infringe these claims, particularly when they are properly construed. Nothing in these contentions should be interpreted as an acquiescence to or assertion of a particular claim construction by Defendants.

#	'200 Claim Language	U.S. Patent No. 5,894,303 ("Barr")
1	1. An apparatus for setting multi-stage displacement resolution of a mouse, comprising:	*To the extent the preamble is considered to limit the claim, Barr discloses an apparatus that sets the multi-stage displacement resolution of a mouse.* *See, e.g.*, Abstract, 1:20-2:27.
1A	a X-Y axis plane displacement detector, for sensing a distance and a moving direction generated by the mouse in a two-dimensional space;	*Barr discloses an X-Y axis plane displacement detector that senses the distance and moving direction of the mouse.* *See, e.g.*, Abstract, 1:20-2:27; 2:45-57("The vertically oriented novel mouse rests in a base which is essentially flat. The novel mouse includes a capacitive ball, mounted for rotational movement within its mounting. The ball is bias mounted and extends from the base and makes rolling contact with the surface over which the mouse is moved or driven. Rotation of the ball in its mounting drives two coordinate wheels are electrically coupled to the computer interface. The internal structure of the mouse may be that which is well known in the art, an example of which is taught

[7] U.S. Patent No. 5,894,303 to Barr issued on April 13, 1999, which was well before the January 18, 2005, filing date of U.S. Patent No. 7,532,200 ("the '200 Patent"), Barr constitutes prior art under 35 U.S.C. § 102(b). To the extent that Barr is found not to anticipate one or more claims of the '200 Patent under 35 U.S.C. §102, Barr renders those claims obvious under 35 U.S.C. §103 when combined with other art identified in Defendants' Invalidity Contentions (e.g., the OmniScan hand scanner described in the December 7, 1993 issue of PC Magazine ("OmniScan"). It would have been obvious to combine the teaching of Barr with other art identified in Defendants' Invalidity Contentions at least because the references all pertain to setting multi-stage displacement resolution of a computer mouse directly through a switch on the mouse.